

**CLAIMS**

1. A method for preparing electrodes based on  
5 activated carbon and carbon nanotubes on a collector,  
comprising the following steps:
  - (a) blending of an initial powdery carbon  
material and a solvent;
  - (b) addition of a polymer binder and blending  
10 until homogenized;
  - (c) drying of the paste;
  - (d) optionally, mixing of the paste; and
  - (e) covering of the collector.
- 15 2. The method as claimed in claim 1, in which step  
a) is carried out by ultrasonication.
3. The method as claimed in either of claims 1 and  
2, in which step a) is carried out at a temperature of  
20 at least 50°C.
4. The method as claimed in one of claims 1 to 3,  
in which the initial powdery carbon material of step a)  
is obtained by a method comprising the following steps:
  - 25 (f) dispersion of the carbon nanotubes in a  
solvent, preferably water;
  - (g) addition of the activated carbon and  
blending; and
  - (h) drying of the initial powdery carbon  
30 material.
5. The method as claimed in claim 4, in which the  
addition of activated carbon is followed by  
ultrasonication.
- 35 6. The method as claimed in one of claims 1 to 5,  
in which the initial powdery carbon material is a blend

of activated carbon and carbon nanotubes, in a weight proportion ranging from 95/5 to 50/50.

7. The method as claimed in one of claims 1 to 6,  
5 in which the binder is an aqueous suspension of PTFE or styrene/butadiene.

8. The method as claimed in one of claims 1 to 7,  
10 in which step d) is carried out to fibrillation of the binder.

9. A method for preparing a paste based on activated carbon and carbon nanotubes, comprising steps a) to d) as claimed in one of claims 1 to 8.

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10. An improved-aging electrode obtained by the method as claimed in one of claims 1 to 8.

11. A supercapacitor comprising at least one  
20 electrode as claimed in claim 10.